

Patent Claims

1. A method for sensing the surroundings in front of a road vehicle by means of a surroundings sensing system, in particular an infrared night vision system in which the surroundings data is sensed by means of a surroundings sensor, and objects within the surroundings data sensed by the surroundings sensor are detected by processing the sensor data,
wherein the perception region in which the objects are detected corresponds to a component-region of the region sensed by the surroundings sensor, characterized in that the perception region is divided into a plurality of component-regions and each of these component-regions is subjected to a specific evaluation.
2. The method as claimed in claim 1, characterized in that before the perception region is divided into a plurality of component-regions in the perception region, either a lane detection is carried out by image processing methods or a lane is defined by means of the data of a navigation system, in order to subsequently restrict the perception region to the lane.
3. The method as claimed in claim 2, characterized in that the perception region is restricted in such a way that, for the purpose of delimiting the lane, a further predefined tolerance region is also added.
4. The method as claimed in one of the preceding claims, characterized in that, for the purpose of carrying out evaluation in the perception region, object perception is carried out by means of image processing methods.
5. The method as claimed in one of the preceding claims, characterized in that, for the purpose of carrying out

evaluation in the perception region, object classification is carried out by means of classification methods in order to rule out false alarms.

6. The method as claimed in one of claims 4 or 5, characterized in that, for the purpose of evaluation in the perception region, the distance from detected objects is determined in order to be able to provide information about obstacles in good time.
7. The method as claimed in one of the preceding claims, characterized in that, for the purpose of carrying out evaluation in the perception region by means of tracking methods, the movement of objects is sensed in order to perceive whether their direction of movement corresponds to the vehicle's own movement.
8. A use of the method as claimed in one of the preceding claims as a safety system in a road vehicle, in particular for acting on other vehicle-internal systems.